Prof. Robert T. Jackson
with Kindest regards,
A. J. K.

A HISTORY

OF

THE GIFT OF PAINLESS SURGERY

BY

EDWARD WALDO EMERSON, M. D.

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Thy godlike crime was to be kind,
To render with thy precepts less
The sum of human wretchedness
And strengthen Man with his own mind.

BYRON'S *Prometheus.*

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PREFATORY NOTE.

One can hardly state strongly enough the debt that the present generation owes to painless surgery, even if, accustomed to its benefits, they forget the weight of suffering and terror it has removed. This year is celebrated the fiftieth anniversary of this wondrous gift.

The writer of the following short history of the discovery and introduction of Anæsthesia has been painfully impressed by seeing that at this time of rejoicing the eminent and gifted man who was the principal, the real giver of that boon, seems well-nigh forgotten. In various articles on the Ether discovery which have recently appeared in the newspapers and magazines, his name is hardly mentioned.

It is well known that when an invention or discovery proves a brilliant success, many claimants to the honor appear, and in this case the abundant and weighty evidence in favor of the true discoverer seems to have been neutralized and obscured in the public mind by the activity of the friends of the introducer, who might well have rested content with his own important share in the good work.

The heat of controversy has passed away and the claimants themselves are gone. The evidence remains. It is to this rather than to extreme partisan statements that the present generation should look in assigning the meed of gratitude and praise for this discovery, — a blessing to man only surpassed by Prometheus's gift of fire to miserable early men.

The writer has examined with care the writings containing the statements, and, more important, the evidence adduced in behalf of both the important claimants to the discovery, and without hesitation refers the readers to these, giving at the end of his own representation of the facts a list of the principal works issued by both sides during the years of the controversy.

Let not gratitude, in contemplating the ready Will and Hand, forget the Mind without which these were vain.

Edward Waldo Emerson.

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A HISTORY OF THE GIFT OF PAINLESS SURGERY.

"THE escape from pain in surgical operations is a chimera which it is idle to follow up to-day. 'Knife' and 'pain' in surgery are two words which are always inseparable in the minds of patients, and this necessary association must be conceded."

Thus wrote one of the greatest surgeons of his time, Velpeau, in the year 1839. Yet within a decade after these hopeless words were written, their author, in common with all the surgeons of the civilized world, was proving that the incredible good news which had come across the ocean from Boston was more than true: painless operative surgery was an established fact, and the way stood open to successes in surgery in all its branches, previously undreamed of, and to-day unexhausted.

A miracle had been wrought. Not only pain, but long anxiety and terror preceding operation — almost worse and more hurtful — have been removed. In such operations as were practiced before the days of anæsthesia, the surgeon is no longer hurried and distracted by the cries and struggles of the patient. The treatment of fractures and dislocations now, when the resulting spasms of muscles are loosened by ether, is as much more satisfactory as the riding of a trained horse is than the catching of a wild zebra and riding him. Orthopædic surgery owes a great debt to ether. Childbirth has lost half its terrors. Tracheotomy can be practiced easily; hence is resorted to in time. In hopeless cases, medical as well as surgical, long misery of difficult breathing or acute or wearing pain can be relieved. But over and above these blessings, a great field has been opened of desperate-seeming operations, now common, practically impossible without anæsthetics, the healing after which has been rendered by Lister's priceless teachings the rule instead of the exception.

All the world now knows and daily profits by this boon of anæsthesia. Hence the fitness of a jubilee over fifty years of painless surgery was recognized, and the anniversary was celebrated in the city where the discovery was made, and in the noble institution where it was first demonstrated to the world, the Massachusetts General Hospital. The generation of surgeons who, having found the practice of their art changed in an instant from a dire duty to pleasure, were thankful as no others can ever be, are gone: the gift of anæsthesia remains; its value increases year by year; but the two men to whom the world owes its discovery and introduction are gone in sorrow to their graves.

Is it graceful to hold fast and rejoice in a gift without ever a thought of the giver? Let the bitterness of the old ether controversy die, as it rightly should after this lapse of time, but let us not fail to remember to-day with due share of gratitude those by whose agency great misery is every day averted, alike in homes and in hospitals.

It is now fifty years since it was first shown that pain in surgery could be annulled, yet the story of the discovery of this fact is absolutely unknown to many of the present generation; to others known only in imperfect or highly partisan statements. Because no adequate or fair narrative has been presented at this time the writer has been impelled to recall the facts. He hesitated, feeling that there was a certain disqualification for the task because of his kinship to Dr. Jackson. On this account he has felt bound to deal fairly with Dr. Morton's claims. He relies on the facts which seem to be established by good

evidence, after examining the leading works in behalf of each of the claimants during the years of the controversy. Readers are referred to these. In the interest of peace and propriety he refrains as far as is possible from comment. At best the evidence is sometimes sadly tangled with sworn affidavits in some degree conflicting. No new evidence can now come, and it is right that the old should be known. But to our story.

First as to the claimants. Charles Thomas Jackson was born in 1805. His taste for scientific pursuits had been marked even from boyhood. He took his medical degree at Harvard University in 1829, and then studied diligently for three years in Europe, principally in Paris, devoting much attention also to chemistry and geology. Returning to Boston in 1832, he began the practice of medicine, but was more and more drawn into his favorite scientific pursuits. His attainments becoming known, he was commissioned by the State of Maine to make a geological survey of and report on its territory, and soon after received similar commissions from the States of New Hampshire and Rhode Island. In 1844–45 he explored the unbroken wilderness on the southern shore of Lake Superior, and discovered and opened its mineral resources. His examinations and reports were minute and valuable, and the amount of work involved in field examinations, subsequent chemical analyses, and then the preparing of full reports, with maps and diagrams, was enormous. He opened a chemical laboratory and instructed students there, and had the constant office work of an analyzing chemist. He was a member of various scientific societies, for which he wrote papers, and he gave lectures upon chemistry.

William T. G. Morton was born in 1819, and graduated at the Baltimore College of Dental Surgery in 1842. He then established himself in Boston, where he soon had a large practice. He decided to study for a medical degree, and entered himself as a student in Dr. Jackson's office in 1844. He claims to have made experiments as to painless surgery in the summer of 1846. On the 30th of September, 1846, after a visit to and conversation with Dr. Jackson upon sulphuric ether, he extracted a patient's tooth painlessly. On October 16 he administered ether to a patient of Dr. John Collins Warren, at the Massachusetts General Hospital, from whom a tumor was removed without the sensation of pain. He received a medical degree later.

What was the discovery claimed? Sulphuric ether and its composition had been long known; that it would stupefy and intoxicate if inhaled, and that fatal results had followed some experiments, was also known; yet it had been used as a medicine internally, and cautious inhalation of it had been prescribed for respiratory or intestinal spasmodic troubles, notably for the painful spasm resulting from accidental inhalation of chlorine gas, apparently on a theory of its being chemically antidotal. The dangers of ether were emphasized by the textbooks; no mention of its surgical possibilities was made, and officinal ether was very impure.

Dr. Jackson, in 1842, distinctly advanced the medical knowledge of the period, in the opinion, after most careful consideration, of the French Academy of Arts and Sciences, and also of Baron von Humboldt, although some distinguished Bostonians at the time contended that he had found nothing new. His interest in sulphuric ether was awakened by the remarkable results he experienced on inhaling it to relieve the effects of chlorine gas, and the next day he deliberately inhaled ether to unconsciousness for the sake of observing these phenomena further. He found that vapor of sulphuric ether, washed wholly free of alcohol and acids, and mixed with a considerable quantity of atmospheric air, could be inhaled with entire safety to the extent of somewhat

prolonged complete unconsciousness, and that by it the sensory nerves were rendered incapable of feeling pain, even before consciousness was quite lost, and a little while after it was regained. This fact Dr. Jackson communicated clearly and confidently, in the year 1842, to Mr. John H. Blake, a manufacturing chemist (father of the distinguished aurist, Dr. Clarence J. Blake); to Dr. William F. Channing, inventor of the electric fire-alarm system; to Dr. S. A. Bemis, of Boston, a respected dentist of large practice, urging him to use it to prevent pain in his dental surgery; and to Dr. George T. Dexter, of New Hampshire, recommending it at a consultation over one of his patients with a diseased and painful spine. In 1843 Dr. Jackson told his discovery to H. D. Fowle, an apothecary, speaking of it as suitable for surgical operations, and of his own desire, when relieved from the immediate pressure of his geological and chemical work, to introduce it for this purpose. In the same year he spoke to the same purpose to Mr. D. J. Browne, a former pupil, and finally, in February, 1846, to Mr. Joseph Peabody, a pupil suffering from toothache, on whom he urged the inhalation of ether during the removal of the teeth; but Mr. Peabody was deterred by the statements in the best textbooks of the danger of this agency. All this evidence of most respectable gentlemen — by affidavit or witnessed letter — has never been shaken. Dr. Jackson, driven by the mass of work which he had undertaken to perform for three States as to their important mining or agricultural resources, with his reports to write and the press of ordinary office work, had no time properly to develop and bring out his discovery; and one can well conceive the pleasure he took in his plan of doing so in the hospitals of Paris, then the metropolis of medical, and indeed of all science.

In the latter half of this period, namely in 1844, Mr. Morton, a dentist, then twenty-four years old, being desirous of obtaining a medical degree, asked Dr. Jackson to take him as a pupil, and also to let him board in his family. Dr. Jackson consented, and Mr. Morton and his wife were for some time inmates of the household. Any one who, like the present writer, remembers Dr. Jackson's brilliant conversation and utterly open way of telling all the new scientific facts, of which his mind was full, will know what an advantage this was for a student. Dr. Morton himself shows, in his memoir to the French Academy,[1] not only that he desired and profited by these opportunities, but that the use of chloric ether locally to deaden the sensitiveness of a nerve in dentistry was taught him by Dr. Jackson, who gave him some ether, which he tried with success, and that at the same time Dr. Jackson told him of the intoxicating effects of sulphuric ether, though he says he did not tell him of any other effects of it. But from that time began the admittedly unsuccessful and unsatisfactory experiments on inhalation of ethers which Dr. Morton alleged that he made at various times, until September 30, 1846.

On that day, Mr. Morton, who had not yet taken his medical degree, and had moved away from Dr. Jackson's house, and had been busily engaged, to quote his own words, "almost exclusively in mechanical dentistry or plate-work, requiring him often to extract a great number of teeth at a time," came into Dr. Jackson's laboratory, where the latter and his two assistants were at work, and borrowed an india-rubber bag. Dr. Jackson asked him for what he wanted it. Mr. Morton said that he proposed to inflate it with air to work on the imagination of a female patient who dreaded the pain of having a tooth drawn. Dr. Jackson urged him not to resort to such means, on the grounds of medical

[1] Printed in full in Littell's Living Age, No. 201, March 18, 1848, in an article setting forth Dr. Morton's claim to the ether discovery.

propriety and also of his own interests, and took away the bag, but said that he would tell Morton of something that would produce a real effect on his patient, and procure insensibility while he removed the teeth at leisure. He further told him where he could obtain sulphuric ether of the requisite purity; showed him some, at his request, and also showed exactly how it was to be administered by inhalation; and assured him of its absolute safety if so given, taking upon himself the whole responsibility. He suggested to Mr. Morton that he should go home and first try the experiment upon himself. Not only is this Dr. Jackson's account of the interview, but it is fully confirmed by the affidavits of the two gentlemen at that time his assistants, Mr. Barnes and Mr. McIntyre, who were present.[1] Dr. Morton's own account, in the memoir referred to, confirms to a great extent this account of the interview. He claims, however, to have made previous unsatisfactory experiments with sulphuric ether, which led him to go to Dr. Jackson to get important chemical information with regard to ethers which he needed, as well as a gas-bag, which last shows his want of knowledge of safe means of inhalation. He alleges that he *feigned* ignorance of sulphuric ether to conceal his schemes, while he was getting from the man who had the knowledge the information and directions essential to his "discovery."

It is also asserted that, during the previous summer, Mr. Morton had mentioned to various persons a discovery that he hoped soon to bring out, which would revolutionize the whole practice of dentistry; but this, he told some of his assistants, was a method of preparing artificial teeth and plates.

Mr. Morton immediately took Dr. Jackson's advice, bought the pure sulphuric ether, and, as he asserts, inhaled it himself, remaining unconscious for seven or eight minutes; and that very evening, following Dr. Jackson's directions, he gave it to a patient in his office, and succeeded in extracting a tooth without pain to the patient. He reported his success to Dr. Jackson next morning in the presence of Mr. Barnes. Dr. Jackson showed no surprise, but told him that this test was not enough, and that he must now persuade the surgeons at the hospital to let him administer it during a surgical operation; if possible, a capital operation. Mr. Morton, although apparently reluctant, took the advice, and obtained Dr. John Collins Warren's sanction to his etherizing a patient on whom the latter was to operate. He did not tell Dr. Warren that Dr. Jackson had sent him or instructed him, nor did he tell Dr. Jackson when the operation would be performed. It was done at the Massachusetts General Hospital on the 16th of October, 1846, with fair success, and was soon followed by a complete success in a more important operation.

Dr. Jackson, with the carelessness of his own interests which characterized him through life, trusting in others' honor, and, moreover, being driven with the arduous work he was doing for several States, which frequently called him away, was not at the hospital at the first operation, and did not immediately publish his claim to the discovery. There is the best of evidence to show that he considered it, of course, his own, looking upon Mr. Morton only as an agent, previously ignorant (in this matter), and now minutely instructed; and that when he learned of Morton's neglect, in many instances, of an all-important part of the discovery, namely, the admission of atmospheric air to prevent asphyxia, he began to express regret that he had entrusted a discovery

[1] In the Report of the Trustees of the Massachusetts General Hospital, January, 1848, Mr. N. I. Bowditch, who claims the *discovery* for Morton on the ground of his first administering ether successfully in a surgical case, admits Morton's debt to instructions and directions then received.

of such consequence to mankind to hands which, from disregard of essential precautions, might discredit it. His expressions on this subject have been twisted into want of confidence in the safety of anæsthesia by ether. His confidence in it was absolute and fearless when administered by the method he had proved on himself and Dr. Channing.

Charles G. Loring, Esq., a lawyer of high standing in Boston, testifies in writing to his having attended a meeting at Dr. Jackson's in November, 1846, of eminent legal, scientific, and medical gentlemen, to whom Dr. Jackson made a full statement of the circumstances of his alleged discovery and his claims, including his relations with Morton, and exhibited evidence; and Mr. Loring adds that his own conviction was entire that Dr. Jackson was entitled to the credit, as between him and Morton, to the entire merit of the discovery, and no intimation of a contrary opinion was suggested at the meeting. Hon. Edward Everett, who first heard of the discovery at the meeting of the American Academy of Arts and Sciences on November 3, wrote to Dr. Jackson, seven years later, after the matter had been fully discussed, "I have always considered it [the discovery] to have been made by you;" and again, "I have read several publications on both sides of the question. . . . Nothing has come to my knowledge which shakes my original impressions as above stated." In this letter Mr. Everett said that, at the Academy meeting above mentioned, Dr. Henry J. Bigelow, describing the dental operations performed by Dr. Morton under the influence of the newly discovered "compound" (as it was then called), "stated that Dr. Morton had derived his knowledge of the substance used from you." Mr. Everett stated that Dr. Bigelow had also, in the Boston Medical and Surgical Journal of November 18, 1846, "ascribed the first suggestion to Dr. C. T. Jackson, and its application, under his advice, for the purpose of mitigating pain, to Dr. W. T. G. Morton." It should be observed that at first, in marked contrast to Dr. Jackson's openness, Morton did not disclose what drug he was using, and called it a "preparation" or a "compound," but soon after was forced to tell the hospital authorities what the anæsthetic was, because they refused to allow its administration there without knowing its nature.

Dr. Morton very early applied for a patent. His counsel informed him that he could do so as being the first person who used the discovery; but on hearing later of Dr. Jackson's claims, this lawyer advised Dr. Morton that it would be safer to have a joint patent, and advised Dr. Jackson that he had better unite with Morton. To this Dr. Jackson, as a physician and a liberally educated man, was strongly opposed; but being urgently counseled that it was the only way to save his rights of discovery in the public eye, and also being assured that the Massachusetts Medical Society's regulations were only against secret remedies, he very reluctantly complied, not for profit, but to hold on to his rights of discovery. He had before charged Mr. Morton a fee for the all-important professional advice which he had given him on the 30th of September. Morton agreed to pay this charge by a percentage on the fees that he should receive for licenses until the amount should be made up, and gave his bond for it. This bond Dr. Jackson, regretting that he had ever taken any share in the patent matter, soon after destroyed. He never received any pecuniary advantage from the use of the discovery, and refused some money that should have come to him under the above arrangement. It was a great error of judgment and taste that he allowed his name to be used with Mr. Morton's in the patent, but, being unpractical in business matters, he yielded to advice of counsel, and later annulled his action. The hospitals should be

grateful to him for having from the outset urged upon Morton the measure of giving freely to hospitals and charitable institutions the use of this great boon. The zeal of the latter gentleman to turn the invention to the greatest pecuniary advantage and appropriate the whole credit of it soon made relations so uncomfortable that Dr. Jackson decided to submit his case to the Academy of Arts and Sciences of France, the highest scientific tribunal in the world. He honorably warned his rival of his intention, and both claimants made their statements to the Academy.

The discovery had been hailed with joy throughout Europe, but the claims of the two alleged discoverers were long and carefully weighed. Much unpardonable misrepresentation having been made on this subject, I will state the exact facts.

After a consideration of the respective claims for more than two years, the Academy awarded "a prize of 2500 francs to M. Jackson for his observations and experiments on the anæsthetic effects produced by the inhalation of ether, and a similar prize of 2500 francs to M. Morton for having introduced this method into surgical practice according to the instructions of M. Jackson." Now much has been made in publications, old and recent, of Dr. Morton's having received "the great gold medal" of the French Academy, and Dr. Jackson only a sum of money. The prizes were exactly equal, but to take a portion of the award in the form of a medal was optional. Dr. Morton chose to do so, and received the ordinary Montyon prize medal, not one especially struck for him, worth 300 francs ($60), which sum was deducted from his 2500 francs. Dr. Jackson, who had received from the French government the cross of the Legion of Honor, preferred to take his Montyon prize in money. M. Elie de Beaumont, perpetual secretary of the Academy, wrote to Dr. Jackson that the medal was not struck especially for Morton; Dr. Jackson could have one precisely like it, only in that case he would receive 2200 francs instead of 2500. Dr. Morton chose to use the money in having a highly ornate circular gold frame with laurel boughs fitted around his medal, which more than doubled its apparent diameter. At first Dr. Morton did not accept the award, but, being advised that he would lose it unless he did so within a given time, he finally accepted it, yet, it is said, with a protest.

The Academy never revised their decision, as has been implied. The distinguished Baron von Humboldt, on behalf of the Prussian government, sent through its minister at Washington a request that the Secretary of State (Hon. Daniel Webster) would procure and transmit to him the evidence of the various American claimants of the discovery. After a prolonged examination of this, Humboldt decided in favor of Dr. Jackson, and the king of Prussia conferred upon him the order of the Red Eagle. The king of Italy and the sultan of Turkey sent decorations to Dr. Jackson, and the king of Sweden, urged by the great chemist Berzelius, sent Dr. Jackson a gold medal especially struck for him as discoverer. Dr. Morton received a testimonial from the trustees of the Massachusetts General Hospital and citizens of Boston of one thousand dollars in a silver casket, and also orders of honor from the governments of Russia and Sweden.

It is proper to state here that there is much evidence that Dr. Morton's first interest in the matter was mainly in its business possibilities, and that only after nearly three months had elapsed from his first successful experiment did he bring out a claim to previous experiments. The array is very large of sworn testimony of the principal assistants at his office, and of physicians and others in various cities and States, whom he employed to sell rights to the use of his patent, to the fact that at first he ascribed all his information about the new

agent to Dr. Jackson, who was a great authority, referred to him as to its safety, and spoke of himself as being most fortunate in having been the first to get the benefit of this new idea derived from Dr. Jackson. To this is opposed, of his assistants, only the evidence of one of the principal ones, whom another witness declares to have admitted to him that he juggled in his testimony with the word "ether" (when the difference between sulphuric and chloric was important), and of three minor assistants, one of whom, a boy, had his testimony very strongly discredited, and one was Morton's brother-in-law. The only really strong witnesses are Mr. Metcalf, the apothecary, and Mr. Wightman, the philosophical-instrument maker: the former testifies to Mr. Morton's having some sulphuric ether in his possession in July, 1846, and to a conversation upon its properties, in which Mr. Metcalf told him of the dangers attending its excessive inhalation; Mr. Wightman states that at about the same time Morton made inquiries of him as to india-rubber bags for holding sulphuric ether, and that he advised him to call upon Dr. Jackson; also that soon afterward Morton came again, and after some mystery told of his wish to have some sort of an ether inhaler to use in producing insensibility to pain in his dental operations. In answer to a question, he said that he had inhaled ether himself, and *that Dr. Jackson said it was not injurious.*

On the other hand, the testimony on Dr. Jackson's side, not only of his own assistants, Messrs. Barnes and McIntyre, but of Dr. Morton's assistants, Messrs. Wilson and Hunt, is very strong. Still, it can never be proved that Dr. Morton did not make independent experiments for a surgical anæsthetic; but that will not materially affect the case, if they were not successful. It is hard to see how any person who reads attentively all the voluminous testimony on both sides of the question can avoid the conclusion that Mr. Morton's visit to Dr. Jackson's laboratory on September 30, 1846, was all important for his success in giving ether; that he there received essential instructions as to the kind and quality of ether, and the method and cautions which would render its administration safe and effective for surgical uses. Before, if he had tried, he had had no success; immediately afterward success was complete.

The age, education, history, and attainments of the claimants, as well as their personal traits, affect the inherent probabilities of the rightness of their claim to the discovery. Both men may have been seeking painless surgery. Both owed to previous investigators, especially Davy, important hints. But the fact that chemically pure sulphuric ether, if duly mixed with atmospheric air, could be breathed with entire safety to the extent of unconsciousness, lasting long enough for the performance of most surgical operations and accompanied as well as preceded and followed for a short time by insensibility to pain, was discovered by Dr. Jackson, and announced to and urged upon others, men of character and professional standing, with the assurance that dental and surgical operations could be made painless by this method, at various times between 1842 and September 30, 1846; this cannot be denied. Dr. Morton did not come upon the scene until the middle of this period, and then as a student, and he made no claim to experiments until the latter part of it. Even if we grant his experiments, Dr. Jackson's claim stands firm.

Whether we take the high or the lower meaning of the word "discovery," namely, authorship or demonstration, Dr. Jackson has a claim; for his experiment upon himself in 1842 was not merely using the prescribed remedy for chlorine poisoning, as has been asserted; having already done that on a chemically antidotal theory, he was so much interested in the remarkable effects that

the next day, taking his life in his hand, according to the best medical authorities of the day, he deliberately inhaled pure ether and air, observing carefully, as a trained physiologist, the symptoms of the agent and their sequence up to the moment of loss of consciousness, and again upon its earliest return; he recognized at once that it was no mere local anodyne to the lungs, but that the sensory nerves were affected before those of motion, and without injury to those of organic life. This was new knowledge, and the bearings of it were marked to a physician who had studied physiology and surgery with enthusiasm under the great masters in Paris. But it is given to few men to realize all that their discoveries imply. Would not Watt have been as amazed as a peasant could he have passed a day in the signal-tower at Rugby Junction and seen what steam power meant?

As to what discovery means, two instances, already used by others, are so apt that I venture to repeat them. Galle first saw the planet Neptune, but it was by directing his telescope to the part of the heavens where Leverrier had decided that the author of the perturbations of Uranus must lurk. Sir David Brewster said before the British Association, "The planet Neptune was discovered by Adams and Leverrier before a ray of its light had entered a human eye." As Mr. J. H. Abbot well says, "Mr. Morton, because he extracted the first tooth without pain, is no more to be considered the discoverer of the new use of ether than the sailor who first shouted 'Land!' from the mast-head, and not Columbus, is to be considered the discoverer of the New World." Discovery in its proper sense was gratefully conceded to Dr. Jackson by the whole European scientific world. It was reserved for certain influential Bostonians to maintain that "*he* [Mr. Morton] administered it [sulphuric ether] to a patient. *By doing so he made the discovery.*"[1]

But Mr. Morton had the enterprise and the courage, without quoting Dr. Jackson's authority and assumption of responsibility for the safety of the means and method, to go before the world and alone etherize a patient for a prolonged cutting operation at the Massachusetts General Hospital, and to repeat the experiment at a capital operation shortly after before the most eminent surgeons of Boston. It was an important and a bold act, an era in surgery, whether it was an honorable act or not. It is but just to admit that, taking Dr. Jackson's previous delay and many interests and occupations into account, the public verification of his discovery, and the priceless boon that such action brought to humanity, might have been long delayed. Therefore let us forget Dr. Morton's failings as far as we can with justice to Dr. Jackson's sacred rights, and give him the honor due to the courageous and enterprising introducer of surgical anæsthesia. Let us concede, too, that Dr. Jackson, in natural indignation at the attempt to rob him of his claim to the real discovery, did not give credit to Dr. Morton for his public verification and introduction of painless surgery. Let the reader only in imagination put himself in Dr. Jackson's place, and he will see why, if he has any human weakness. Both Dr. Morton and Dr. Jackson, by accepting the respective awards of the great scientific tribunal of the day, the French Academy, lost their right to claim more, and closed their case. Why should we try to rob either of these men, now dead, of his share?

In a petition of Massachusetts physicians and surgeons addressed to Congress in 1852, protesting against any

[1] Report of the Board of Trustees of the Massachusetts General Hospital, January, 1848. On page 30 of that report is a charge of a dishonest use of the American Academy's name by Dr. Jackson, which was unfounded, and was overthrown by the testimony of Nathan Hale, Esq., and Hon. Edward Everett.

grant of money exclusively to Dr. Morton for the discovery, and headed by the honored Dr. Morrill Wyman, is contained this wise verdict by which we should do well to abide: In relation to this great discovery of etherization, Dr. Jackson was the *head*, and W. T. G. Morton the *hand*.

Edward Waldo Emerson.